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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,093	03/19/2004	Richard D. Morris	5243	. 7704

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MILA KASAN, PATENT DEPT.
APPLIED BIOSYSTEMS
850 LINCOLN CENTRE DRIVE
FOSTER CITY, CA 94404

EXAMINER

TWEEL JR, JOHN ALEXANDER

ART UNIT	PAPER NUMBER
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2636

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/805,093	Applicant(s) MORRIS ET AL.	
	Examiner John A. Tweel, Jr.	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15, 17-40, 42-45, 52-59 and 61-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15, 17-40, 42-45, 52-59 and 61-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/28/05</u> . | 6) <input type="checkbox"/> Other: _____ |

1. This Office action is in response to the amendment filed 12/28/05. Claims 1, 10, 12, 13, 15, 18-20, 28, 39, 42-45, and 59 have been amended. Claims 14, 16, 41, 46-51, and 60 have been canceled. Claims 70-72 have been added.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-7, 12, 15, 18, 19, and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Patek et al** [U.S. 6,541,211] in view of **Rasch et al** [U.S. 6,094,137].

For claim 1, the apparatus for associating information with a biological reagent taught by **Patek** includes the following claimed subject matter, as noted, 1) the claimed carrier is met by the frame (No. 32) for carrying a plurality of reagent containers, and 2) the claimed tag is met by the RFID chip (No. 34) coupled to the carrier.

The reference does not depict an RFID reader; however, readers have been used with RFID tags since their inception. The use of one in the reference is considered an obvious variation on the prior art and not a patentable innovation. Also, the reference does not mention licensing rights as the type of information read from the tag.

Licensing rights is but one of a myriad of types of information that can be programmed into the memory of an article surveillance tag. The method for incorporating an electronic marker into a book taught by Rasch enables a user to

Art Unit: 2636

monitor sales, ownership and licensing status of a book or associated product. This is plain evidence that licensing information can and has been included on EAS tags for some time. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include licensing rights on a tag for the purpose of using a well-known and common form of data storage.

For claims 2-7, the type of container the RFID tag is attached to is not considered a patentable innovation as RFID tags have been embedded and adhered to many different types of containers, such as boxes, bags, envelopes, glasses, and even articles of clothing. The specific carriers mentioned in these claims are but a few materials RFID tags have been associated with.

For claim 12, the tag of Patek is a RFID tag.

For claims 15, 18, and 19, the claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claims 12-14 above.

For claim 70, the system of Patek allows an authorized user to change information and security status of the book or associated product.

4. Claims 8, 9, 13, and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Patek et al** in view of **Rasch et al** as applied to claim 1 above and further in view of **Brady et al** [U.S. 6,201,474].

For claim 8, the reference taught by Patek includes the claimed subject matter as discussed in the rejection of claim 1 above. However, there is no mention of embedding the antenna in an interior portion of the carrier.

Embedding tags within carriers is not new in the prior art. The tape storage media taught by Brady includes a videocassette having an RFID tag embedded within as seen in Figures 3 and 4. The obvious advantage of this system is that it provides easier and more readily available information and tracking purposes.

As the biological reagents require careful tracking and information corresponding thereto needs to be carefully recorded, it would have been obvious to one of ordinary skill in the art at the time the invention was made to embed the RFID antenna in the biological carrier of Patek for the purpose of insuring reliable tracking and information purposes.

For claim 9, figures 1 and 2 of Brady depict an RFID tag adhered to at least part of an exterior portion of the tape.

For claim 13, one embodiment shown in Figure 6 of Brady includes microwave circuitry.

For claim 20, the apparatus for associating information taught by Patek includes the following claimed subject matter, 1) the claimed microarray is met by the reagent carrier (No. 32) seen in figure 14A, the specific type of carrier not being a patentable innovation as RFID tags have been embedded and adhered to many different types of containers, 2) the claimed RFID tag is met by the RFID tag (No. 34). However, there is no mention of licensing rights information comprises information on whether a user has a license to use the microarray.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 1 above. The Rasch reference allows authorized users to alter the information on the book tag. Also, there is no mention of a substrate.

Substrates have been used to mount RFID electronics and circuitry for some time. The storage media taught by Brady teaches the use of a substrate (No. 140) onto which RFID antennae have been etched to communicate with RF readers and writers. This reference is plain evidence that substrates have been used with RFID tags for some time. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a substrate with the RFID tag of Patek, as this is a well-known method of attaching RFID technology to carriers.

For claims 21 and 22, the type of information contained on the RFID chip is not considered a patentable innovation as RFID chips have been used in a wide variety of applications such as inventory, delivery management, sample information and location. Information such as nucleic acid sequence and spot pattern are easily programmed into RFID technology.

For claims 23-27, nearly every substrate used to mount RFID tags has first and second surfaces facing opposite directions. Similarly, RFID antennae have been etched and embedded in and on substrates for some time. The location of the antenna on the substrate is not considered a patentable innovation.

Art Unit: 2636

5. Claims 10, 11, 17, 28-38, 45, 52-58, 66-69, 71, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Patek et al** in view of **Rasch et al** as applied to claim 1 above and further in view of **McNeil** [U.S. 6,429,016].

For claim 10, the apparatus taught by Patek and Rasch includes the claimed subject matter as discussed in the rejection of claim 1 above. Although readers have been used in RFID technology since their inception, there is no mention of an instrument having an RFID reader and at least one output interface that provides output information.

The system and method for sample positioning taught by McNeil includes a reading device (No. 73) designed to interface with whatever identification means is used to identify the carrier, whether it be an LED and optical sensor or RFID tag having an associated reader. A display system is mentioned in the description to assist in the identification and status of the system. This reference is plain evidence that RFID readers and output systems have been used for some time. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reader and output system as this is a well-known and common method of RFID tracking and information handling.

For claim 11, RFID technology does not require line-of-sight to the RFID tag, thereby preventing optical scanning by the reader.

For claim 17, the apparatus of Patek and Rasch includes the claimed subject matter as discussed in the rejection of claim 15 above. However, there is no mention of a biological instrument comprising a reader for the RFID tag.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 10 above.

For claim 28, the apparatus for associating information with a biological reagent taught by Patek includes the following claimed subject matter, as noted, 1) the claimed carrier is met by the frame (No. 32) for carrying a plurality of reagent containers, and 2) the claimed RFID tag is met by the RFID chip (No. 34) coupled to the carrier. However, the information stored on the tag does not include licensing rights information.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 1 above. Although readers have been used in RFID technology since their inception, there is no mention of an instrument having an RFID reader and at least one output interface that provides output information.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 10 above. RFID technology does not require line-of-sight to the RFID tag, thereby preventing optical scanning by the reader.

For claim 29, the apparatus for associating information with a biological reagent taught by Patek includes the following claimed subject matter, as noted, 1) the claimed carrier is met by the frame (No. 32) for carrying a plurality of reagent containers, and 2) the claimed RFID tag is met by the RFID chip (No. 34) coupled to the carrier. Although readers have been used in RFID technology since their inception, there is no mention of an instrument having an RFID reader and at least one output interface that provides output information.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 10 above.

For claim 30, the biological instrument controller found in McNeil comprises instrument hardware.

For claim 31, the McNeil reference is designed to be run and associated with a standard personal computer.

For claims 32-37, the type of information contained on the RFID chip is not considered a patentable innovation as RFID chips have been used in a wide variety of applications such as inventory, delivery management, sample information and location. Information such as instrument operation is easily programmed into RFID technology.

For claim 38, the workstations used in the McNeil reference perform a variety of functions such as optical measurements, washing, incubation, and filtration.

For claim 45, the method for associating information regarding biological reagents with carriers taught by Patek includes the following claimed subject matter, as noted, 1) the claimed providing a carrier is met by the frame (No. 32) for carrying a plurality of reagent containers, and 2) the claimed RFID tag is met by the RFID chip (No. 34) coupled to the carrier. Although readers have been used in RFID technology since their inception, there is no mention of receiving supplemental information associated with the reagent as well as reading genealogy information regarding the biological reagent.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 10 above.

For claims 52-58, the type of information contained on the RFID chip is not considered a patentable innovation as RFID chips have been used in a wide variety of applications such as inventory, delivery management, sample information and location. Information such as lot number, country of origin, work order, customer identification, and customs service information is easily programmed into RFID technology.

For claim 66, the method for associating information regarding biological reagents with carriers taught by Patek includes the following claimed subject matter, as noted, 1) the claimed providing a carrier is met by the frame (No. 32) for carrying a plurality of reagent containers, and 2) the claimed RFID tag is met by the RFID chip (No. 34) coupled to the carrier. Although readers have been used in RFID technology since their inception, there is no mention of receiving instrument operation information associated with the reagent.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 10 above.

For claims 67-69, the type of information contained on the RFID chip is not considered a patentable innovation as RFID chips have been used in a wide variety of applications such as inventory, delivery management, sample information and location. Information such as software control, sequence of operations, and changing states information is easily programmed into RFID technology.

For claim 71, the system of Patek allows an authorized user to change information and security status of the book or associated product.

For claim 72, computers used in RFID technology have been connected into networks for some time. The use of one in this combination of references is not considered a patentable innovation.

6. Claims 39, 40, 42, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Patek et al** in view of **McNeil** and **McDonald** [U.S. 6,211,781].

For claim 39, the method for associating information regarding biological reagents with carriers taught by Patek includes the following claimed subject matter, as noted, 1) the claimed providing a carrier is met by the frame (No. 32) for carrying a plurality of reagent containers, and 2) the claimed RFID tag is met by the RFID chip (No. 34) coupled to the carrier. There is no mention of a reader in the Patek reference.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 10 above. Also, there is no mention of the information being real-time physical location information.

The method and apparatus for tracking and locating a moveable article taught by McDonald tracks an article through geographic areas using RF signals. The article contains a tag operating as a transmitter and receiver that can be monitored by a plurality of tag-readers in near real-time. This is ample evidence that real-time location information can and has been provided to users for some time. It would have been obvious to one of ordinary skill in the art at the time the invention was made to track the tag in real-time for the purpose of taking advantage of a well-known and common system.

For claim 40, the McNeil reference tracks the location of biological reagents during manufacturing processes.

For claim 42, the method for tracking and locating a moveable article taught by McDonald uses triangulation (Col. 9, Ln 61) to locate articles using RF signals.

For claim 44, inventory is a common and well-known RFID function. The use of RFID for inventory is not considered a patentable innovation.

7. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Patek** in view of **McNeil** and **McDonald** as applied to claims 39 and 40 above, and further in view of **UmiKer** [U.S. 6,483,434].

For claim 43, the method taught by the combination of references above includes the claimed subject matter as discussed in the rejection of claim 41 above. However, there is no mention of receiving real-time location using GPS coordinates.

The method for tracking a container taught by UmiKer uses GPS (Col. 2, Ln. 2) to locate articles having RF signals. This reference is plain evidence that GPS has been used to locate articles having RFID tags. It would have been obvious to one of ordinary skill in the art at the time the invention was made to locate the RFID tags using GPS, as this is a well-known and common method of location.

8. Claims 59 and 61-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Patek et al** in view of **Rasch et al** and **McNeil**, and further in view of **Valiulis** [U.S. 6,317,028].

For claim 59, the method for associating information regarding biological reagents with carriers taught by Patek includes the following claimed subject matter, as noted, 1) the claimed providing a carrier is met by the frame (No. 32) for carrying a plurality of reagent containers, and 2) the claimed RFID tag is met by the RFID chip (No. 34) coupled to the carrier. There is no mention of licensing rights information in the Patek reference.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 1 above. Although readers have been used in RFID technology since their inception, there is no mention of receiving licensing rights information associated with the reagent and authorizing use of the biological reagent.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 10 above. The system of Rasch enables authorized users to change the information contained or associated with a book or product. Also, there is no mention of authorizing use of the biological reagent.

The Valiulis reference teaches the use of RFID as authentication using password codes and communication circuitry capable of transmitting the password codes. This reference is plain evidence that RFID technology has been used for authentication in order to reduce theft and add security to the system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the RFID tags for authentication for the purpose of increasing the security of the system.

For claim 61, the system of Valiulis is used for authentication purposes.

For claim 62, the system of McNeil involves different activities on a plurality of instruments.

For claim 63, RFID identifiers are commonly digital signatures. The use of one is not a patentable innovation.

For claims 64 and 65, the Valiulis reference also provides for recall information and other safety issues.

Response to Arguments

Argument 1:

"As discussed above, *Patek et al.* discloses that use of RFIDs can be useful for recording the identity of lanterns and frames during synthesis of chemical compounds. This reference fails, however, to disclose or suggest an RFID tag that includes instrument operation information for a biological reagent as in claim 29 of the present application."

Argument 2:

"As discussed above, *Patek et al.* discloses that use of RFIDs can be useful for recording the identity of lanterns and frames during synthesis of chemical compounds. This reference fails, however, to disclose or suggest receiving, from an RFID tag, instrument operation information for a biological reagent as in claim 66 of the present application."

Art Unit: 2636

9. Applicant's arguments filed 12/28/05 have been fully considered but they are not persuasive.

Response to Arguments 1 and 2:

As mentioned above and in a previous Office action, the type of information stored in the memory of an RFID chip or tag may be myriad and different according to the application it is used for. Numerous RFID tags include memories containing information describing and defining the object or product it is associated with, such as identification, manufacturing date, expiration date, title, inventor, author, security information, price, and licensing information. The corresponding instrument operation information is but one piece of information that may be applied and stored in said RFID tag memory. It is for this reason that this information is considered an obvious variation on the crowded prior art as well as any information that may be contained on RFID tags, for that matter.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 2636

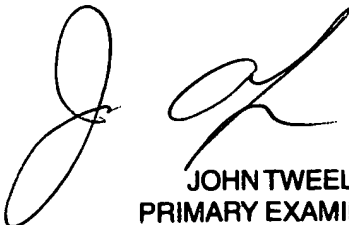
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Tweel, Jr. whose telephone number is 571 272 2969. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass can be reached on 571 272 2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT
3/14/06



JOHN TWEEL
PRIMARY EXAMINER